CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

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COUNTRY	Hungary	REPORT	
SUBJECT	Diósgyör Engineering Works (Dimavag)	DATE DISTR.	14 October 1954
		NO. OF PAGES	7
DATE OF INFO.		REQUIREMENT NO.	RD
PLACE ACQUIRED		REFERENCES	

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THE SOURCE EVALUATIONS IN THIS REPORT ARE DEFINITIVE. THE APPRAISAL OF CONTENT IS TENTATIVE. (FOR KEY SEE REVERSE)

1. Diósgyör Engineering Factory(Diósgyöri Gépgyár)

Abbreviated name: Dimavag Gépgyár.

Former name: Mavag (Magyar Állami Vas-, Acél- es Gépgyár, i.e. Hungarian State Iron and Steel and Engineering Works).

Address: Diósgyör - Vasgyár.

2. Location.

The factory is situated between the town of Miskolc to the east and the locality of Diósgyör to the west. East of the site there is a large area occupied by workers' homes which extend eastward as far as the Diósgyör Metallurgical Works at a distance of roughly two miles.

3. Production.

a. Range of products:

(1) Machining and finishing of axles and wheels of rolling stock and motor vehicles of all kinds, (these operations consisting of turning work on axles and wheels, pressing of wheels on axles by hydraulic process and finishing of the assemblies.)

(2) Machining of heavy main shafts of steam and diesel engines (marine engines, diesel-electric cars and coaches).

(3) Heavy lathes (type EU-1,600).

(4) Special-purpose heavy machine-tools.

(5) Heavy milling machines.

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(NOTE: Washington distribution indicated by "X"; Field distribution by "#".)

(6) Machining of sections composing the lining of the subway construction in Budapest.

(7) Machining of artillery shells of large calibers. The shells are fully processed with the exception of being filled.

(8) Files.

(9) Heavy sections (compartments of blast furnaces and other metallurgical plants, factory stacks, bases for cranes, etc.)

(10) Heat treatment for other factories.

(11) Turning, cutting and milling of pieces of exceptionally large size and weight.

(12) Special tools such as mandrels, cutting tools, bricket pressing cylinders, reamers, drills, but mainly tools of unorthodox design and large size.

(13) Machining of helical cogged wheels of unusual pattern.

(14) Cable-making machines (for wire ropes, electrical cables, etc.)

b. Current production:

(1) Production in September 1953 was running at a value of about 540 to 600 million forints p.a.

(2) Machining of axles of all kinds was running at a total rate of 14,400 axles p.a. 90% of all axles in Hungary are machined in this factory.

(3) Heavy lathes were being produced at a rate of 420 to 480 p.a.

(4) Turning of the main-shafts of 275 hp. stationary steam engines, Jendrassik-type 170 marine engines and diesel-electric trains and coaches.

(5) Among special-purpose heavy machine tools listed in Para. 3 a (4), this factory produces certain components of a 6,000-ton hot stamping press which is being manufactured in collaboration with Czechoslovak and Soviet-German works. This machine tool is intended for pressing end plates of steam boilers and likewise other components of heavy plants. It will press pieces of diameters up to 3,000 mm. The press in question was to be erected at the MAVAG Locomotive and Engineering Works in Budapest.

(6) The production of sections of tube linings for the subway under construction in Budapest was slowed down by 90% in July 1953.

c. Production priorities:

It is believed that the order of priorities is as follows:

(1) Machining of axles.

(2) Production of lathes.

(3) Production of special machine tools.

(4) Production of artillery ammunition.

(5) Production of heavy sections.

(6) Machining of large and heavy components of plant equipment.

(7) Production of cogged wheels of unorthodox design.

(8) Production of special cutting tools.

4. Materials

a. Identities of sources:

Forged axles of rolling stock and vehicles of all kinds Iron and steel castings Sections, angles, etc. Steel bars	Lenin Metallurgical Works, of Diósgyör.
Sections Steel bars Plates	Ózd Metallurgical Works.
Castings	Borsodvidék Engineering Factory
Welding electrodes	Rákosi Mátyás Metallurgical Trust, Electrodes Factory.
Copper bars Bronze metals for bearings Sundry metals	Rákosi Mátyás Metallurgical Trust, Metals Factory
Ball bearings	Central Ball Bearings Depot (Imported)
Standard cutting tools Chucks for lathes (Hungarian made)	Distributive Enterprise for High-Duty Steel and Tools (Nemesacél- és Szerszámértékesitö Vállalat)
Chucks for lathes (imported)	Technimpex (Import Organization for Technical Materials)
Electric meters	Klement Gottwald Electrical Works, (formerly Ganz)

b. Deficiencies in quality:

(1) The forged axles supplied by Lenin Metallurgical Works of Diósgyör are frequently deficient, the material being streaky and containing embedded particles of slag. In some cases there are cracks. These faults are discovered only during and after machining, and in many cases 20% to 50% of the axles are rejected.

(2) The high percentage of waste is due to the following faults in the metallurgical treatment of the steel:

(a) The charging of open-hearth furnaces is not carried out as prescribed: either the melting process is not continued long enough to allow the charge to mix sufficiently and to become homogenous, or the heat treatment is of too short duration and the temperature too high, resulting in particles of refractory brick detaching themselves from the lining of the furnace and becoming embedded in the steel.

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(b) The forging is not carried out at the prescribed heat.

(3) Castings show porosity and contain caverns.

5. Destinations of Products.

a. Export consignees:

(1) Heavy lathes:

It is not known to which countries exports are currently made, but in the past the following countries have been supplied:

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Poland
Rumania
Bulgaria
China

(2) Cable-making machines:

It is known that these have been exported to Bulgaria, and probably to other countries as well.

b. Internal consignees:

(1) Machining and turning:

Axles, cogged wheels, main shafts and special tools, after machining, are delivered to the various concerns all over the country for whose account the work is done.

Axle- and wheel-assemblies of locomotives and rolling stock are destined to the State Railroads, the Ganz Railroad Car Works, the Mavag Locomotive and Engineering Works, the Győr Railroad Car Works and the Dunakeszi Railroad Car Factory.

(2) Steel sections:

These were supplied to two large projects, e.g. the Sztalin Iron Works and the subway in Budapest.

6. Transport.

a. All incoming materials and semi-finished products are transported by railroad and truck.

b. The same applies to the transport of outgoing products.

7. Power.

a. Electric power is used.

b. The source of power supply is the national grid as well as the Bersodvidék Power Station and the Mátravidék Power Station.

c. If the power supply were to fail there would be no alternative source of supply and production would come to a standstill.

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8. Labor.

a. The total number of employees is between 5,000 and 5,500, of whom about 800 to 1,000 are women.

b. The workers live either at Diósgyör or Miskolc, or in nearby villages.

c. Transportation of workers is by train, streetcar (Miskolc-Diósgyör Line) and by buses. Many use bicycles.

9. Machinery.

a. The characteristic feature of the available machine tools is that they consist of unusually heavy units, capable of machining pieces of very large dimensions such as no other shops in Hungary are able to handle. They include the following:

(1) Vertical turning mills

(2) Turret lathes

(3) Vertical lathes

(4) Planing machines, the largest of which has a stroke of 35 m.

(5) Milling machines

(6) Boring machines

(7) Special machinery (not a lathe) which makes it possible to carry out machining on exceptionally large pieces, e.g. pieces with diameters of up to 30-32 m.

b. The machinery is of many different kinds and includes speciments built in the factory's own shops, for instance the various machine tools in the shop where segments for the subway linings were machined (single-purpose machines constructed from components of old discarded machines).

c. The following percentages are an estimate of the age of the machine tools:

30% New, i.e. acquired since 1945.

30% Between 10 and 15 years old.

40% 25 to 30 years old and "home-made", including some entirely outdated machinery of pre-World War I vintage which is the equipment of the files shop.

d. Measuring instruments, etc.:

There is a well-equipped test room (with automatic air conditioning) containing all the measuring tools required. But there is neither a chemical nor a mechanical laboratory. (Analyses requiring a laboratory are carried out at the Lenin Metallurgical Works of Diósgyör.).

e. Mechanical handling equipment:

Mechanical handling facilities consist of electric fork trucks and electrically-driven cranes.

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10. Quality and Quantity Control.

a. The control of efficiency is carried out in the same way as at the Csepel Automobile Works.[1]

b. The quality control organization consists of 250 inspectors of average efficiency.

11. Bottlenecks.

a. No serious bottlenecks in the past 5 years are known, except that in 1952 there was a temporary drop of production caused by faulty materials of bearings (ball bearings and bronze bearings).

b. No serious bottlenecks affecting current production are known.

c. Points vulnerable owing to their productive importance are:

(1) The machining shops for axles and wheel assemblies,

(2) The shops where sections of large dimensions are machined.

(3) The artillery shell production plant.

(4) The heat-treating installation

(5) The cranes are of essential importance in view of the large weights of products handled. The elimination of the cranes would cripple production.

12. Security.

a. There is no armed guard to protect the factory. The nature of security in the ammunition plant is not known.

b. The elimination of any particular person would not cause a setback in production. The organization of production and leadership is deliberately designed so that its functioning should never depend on any individual person. The sole exceptions to this principle are in the cases of inventors or brilliant technical experts, but these cases are extremely rare.

c. Identities of leading personnel:

Director:

Pálmai (fnu), formerly a manual worker. He is a Party member.

Chief Engineer:

Péter Mausz, and engineer. Has been in this factory for 40 years. He is a Party member.

Leader of quality control:

József Schneider, a technical graduate. Not a Party member.

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